

In the Aleutian region the center of low pressure lay nearly over or slightly to the westward of Dutch Harbor, and on several days during the first third of the month was sufficiently active to occasion storm to hurricane winds over an area roughly embraced between the 45th and 50th parallels, and from the 180th meridian eastward to longitude 165° W. The low had decreased greatly in activity during the last half of March. A secondary low occurred intermittently over the Gulf of Alaska, and from it cyclones entered the continent on the 1st, 4th, 7th, 14th, 19th, 21st, 23d, and 26th. Few gales were reported from this area, however. In fact, comparatively little stormy weather occurred east of the 160th meridian of west longitude. West of it, in addition to the area of violent storm already alluded to, the square roughly bounded by the 35th and 50th parallels, 150th and 170th meridians of east longitude, was the scene of an equally violent storm from the 8th to the 11th. The following report from the American tank steamer *Cypsa*, Yokohama to San Francisco, T. N. McLeod, master, G. Watts, navigating officer and observer, will serve as an index to the roughness of the weather of this period:

March 8, 1925.—8 hours, ESE. 5, 29.74. Moderate westerly swell, overcast sky, sleet, visibility moderate. Noon, position by D. R., 42° 10' N., 167° E. SSE. 9, 29.32. Moderate to heavy sea, overcast, moderate visibility. 13 hours, SE. 10, 29.20. Weather conditions indicating cyclone in vicinity. Reduced to half speed and hove to, starboard tack, heading ESE. 14 hours, SE. 11, 29.15. 15 hours, SE. 11, 29.10. 16 hours, SSW. 11, 29.00. Mountainous sea, very heavy rain with severe squalls. 17 hours, SW. 10, 29.00. Vessel heading SSE. 18 hours, SW. 8, 29.03. 19 hours, SW. 7, 29.00. 20 hours, SW. by W. 7 to 6, 28.97. Vessel hove to heading S. by E., labouring heavily to mountainous sea, violent rain squalls. 21 hours, WSW. 8, 28.98. Vessel heading S. by E. 22 hours, W. by S. 7, 29.00. Vessel heading south. 23 hours, W. 8, 28.98. Vessel heading south. Midnight. W. 8, 28.91. Vessel heading south, labouring and straining heavily to mountainous confused sea, violent squalls.

March 9.—1 hour, W. 8, 28.87. Hove to heading south, riding to mountainous sea; 1.20, engines eased to slow ahead. 2 hours, W. 9, 28.78. 3 hours, W. 10, 28.78. Vessel heading SW. 3.30 hours, W. 12. Very fierce squalls, with heavy rain and hail. Centre passed vessel's stern, traveling NE. by N. 3.45 hours, W.

by N. 11. Barometer rising. 4 hours, WNW. 12, 29.03. Vessel hove to heading SW. by W., mountainous sea, fierce squalls. 5 hours, NW. by W. 11, 29.15. 6 hours, NW. 10, 29.40. 7 hours, NW. 9, 29.43. 8 hours, NW. 8, 29.50. Vessel hove to heading SW. by W., very heavy sea, cloudy sky, clear weather.

The various reports indicate more frequent and heavier snow squalls over the western half of the northern sailing routes than during any previous month of the season.

No information is at hand indicative of storms of a tropical nature in the Far East.

Along the western coast of Mexico and Central America conditions were quiet, no vessel reporting a single gale in these waters.

Except over the central Aleutians, pressure was practically normal at the island stations usually considered in connection with this meteorological element. At Dutch Harbor the average 8 p. m. pressure was 29.63 inches, or 0.11 inch less than the normal. The extremes were 30.42, on the 26th, and 28.56, on the 20th. To the eastward, at Kodiak, the average pressure was 29.76, or 0.01 inch above the normal. Here the extremes were 30.28, on the 11th, and 28.80, on the 3d. At Midway Island the 8 p. m. average was 30.09, or also plus 0.01 inch. The extremes were 30.34, on the 30th, and 29.82, on the 13th. A similar plus departure of 0.01 inch occurred at Honolulu, the average being 30.03, and the extremes, 30.17, on the 30th, and 29.75, on the 13th, these dates coinciding with those of similar data at Midway Island.

Fog was observed over nearly all parts of the ocean north of the 30th parallel, though most frequently east of the 170th meridian west. Here, especially between the 45th and 52d parallels, eastward to the 140th meridian, fog was entered by vessels on nearly every day from the 4th to the 20th. Along the American coast less fog was reported than in February—none from southern waters, and little north of San Francisco. Between San Francisco and the 30th parallel fog was noted by steamers on nine days.

## DETAILS OF THE WEATHER IN THE UNITED STATES

### GENERAL CONDITIONS

ALFRED J. HENRY

March, 1925, like February, its immediate predecessor, was characterized by above-normal temperature in all parts of the country save the extreme southern tip of Florida. It was the second month of above-normal temperature in all parts of the country—a rare occurrence. The drought continued and was especially severe in the Gulf States and the Southwest.

A characteristic of both February and March, 1925, was the lack of intensity in the cyclones which gave character to those months. In March, 90 per cent of the cyclones decreased in energy with movement toward the Atlantic seaboard and a relatively large percentage did not reach the coast line. The usual details follow.

### CYCLONES AND ANTICYCLONES

By W. P. DAY

The rapid fluctuations in pressure and temperature which characterized February continued in lessening degree during March. The number of lows charted was about the same as in January and February, but there was a falling off in the number of highs. Two important

storms affected interior districts, one which developed over the Southwest on the 12th and moved northeastward to Eastport, Me., by the night of the 14th, and another, originating over the Pacific, but of little importance until it had swung southeastward across the Rocky Mountains, which developed considerable intensity during the evening of the 18th as it passed over southern Illinois and southern Indiana. It was at this time that several very severe tornadoes occurred, their tracks paralleling that of the major disturbance. A typical Spring high developed and spread southward over the Lake region between the 29th and the 1st of April.

### FREE-AIR SUMMARY

By V. E. JAKL

It will be seen from Tables 1 and 2 that free-air conditions in March corresponded quite closely with the normal. This applies to the averages for all elements, for while there was a general excess in temperature at all stations for all levels, the departures were unimportant, being in no case more than two whole degrees above normal. The averages of relative humidity and vapor pressure for the upper air also show that while the month was drier than usual, the departures were unimportant.